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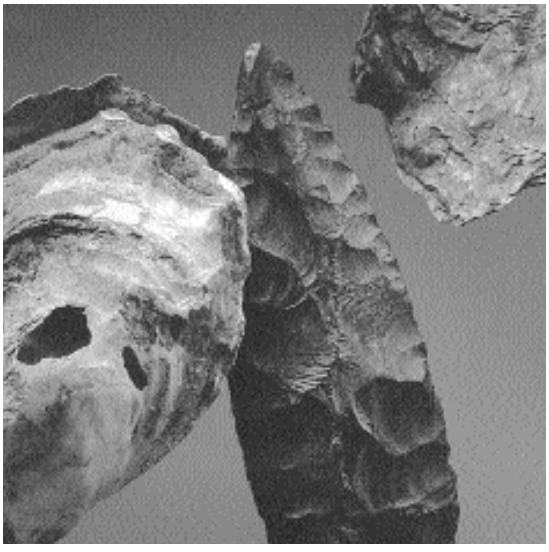
The Eastern Oyster

Changing Uses from an Archeological Perspective

How humans use their environment provides a window into their cultural values. From the archeologist's perspective, artifacts and eco-facts surviving from the past often reveal a constantly changing relationship toward natural resources. The discarded food refuse which many times makes up the archeological record testifies to cultural differences in utilizing specific natural resources. The eastern oyster (*Crassastrea virginica*) has been recovered from a number of different archeological contexts and time periods in Connecticut. Analysis of the diverse archeological contexts for this mollusk provides an important example of how changing uses reflect different cultural values.

Native Americans of southern New England harvested oysters as early as 4,000 years ago, evidenced by assemblages of discarded food products recovered from shell middens located along the region's shoreline. When shellfish decompose within the soil, they leach out calcium carbonates which neutralize soil acidity and enhance the organic preservation of bone and wood in the midden matrix. As a result, shell midden sites often include significant archeological features where unusual preservation factors reveal the overall subsistence pattern of the people involved. These sites indicate that native peoples possessed an extensive knowledge of their natural world and knew how to exploit a wide range of resources for subsistence purposes. While shell middens are sometimes remarkable in overall size and approach depths of 10 feet, oysters and most other shellfish do not provide high caloric and protein requirements and were probably never more than supplements for diets which consisted mostly of vegetables and meats. Nonetheless, extensive harvesting, primarily the role of native women, is suggested by stratigraphic differences in oyster size recovered from midden sites.

By the time Europeans arrived in the New World, population pressures had long since overwhelmed the natural resources of their home continent. In southern New England, colonists applied a tradition of farming techniques that maximized the yield of a minimal plot of land. For example, archeologists often find oyster shell spread throughout 18th-century farm sites. In addition to reducing soil acidity and improving the short-term productivity of the land, seashells



Left, Native Americans harvested oysters as early as 4000 years ago, evidenced by assemblages of discarded food products, called middens.

Right, after 1880, oysters changed from being a natural resource harvested by individuals for local use to a national market commodity.

also served as a source of lye for their fields. From the European perspective, nature was not just something to use, but something to be improved. Thus, for colonial Connecticut, oysters were more highly prized as a fertilizing agent than as a table food.

The Industrial Revolution gave rise to commercial fertilizers and improved agricultural knowledge leading to increased soil productivity. Likewise, the harvesting, processing, packaging, and transporting oysters became more sophisticated. Prior to 1840, oysters and other shellfish were transported up the Connecticut River housed in their shells, hence archeologists have excavated colonial and early-19th-century homestead kitchen middens with occasional oyster shell refuse. After 1840, shucking operations were established along the coast with the oyster meat packaged in tins and bottles for transport up river. For that reason, the archeologists recover bottles and cans from kitchen trash middens dating from this period instead of shell fragments. As a result of intensive population growth and a changing economic structure, the Connecticut oyster industry expanded rapidly after 1880. Coincidentally, oysters evolved into a dietary "delicacy" and as a result, oysters changed from being natural resources harvested by individuals for local use to a national market commodity driven by the abstract forces of supply and demand. This evolution illustrates the 19th-century cultural success for harnessing nature as a potent fuel for economic growth.

However by 1930, the oyster population fell victim to the success of over-consumption and pollution. Today, with the assistance of scientific research, we are learning the benefits of managing and cultivating natural resources instead of simply exhausting them. If we want oysters, we must ensure healthy ecosystems. Fortunately, American consumers are becoming more sophisticated and selective about the foods they eat. In response, the marketplace incentive is now to acquire more extensive knowledge of our natural world, especially organic evolution and ecology, and to successfully manage these resources. Connecticut oysters are now more abundant than they have been in over a century.

The different cultural uses of and appreciation for the eastern oyster was the educational theme of Connecticut's Archaeological Awareness Week 1999 poster.

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Photos from Connecticut's Archaeological Awareness Week, 1999 poster. Photos by Drew Harty.

Don't Forget the Beer. . .

Archeology undertaken as part of the Adriaen's Landing redevelopment project in Hartford, Connecticut, recently documented some lengthy stretches of brownstone foundations associated with the Charter Oak brewery, built by Irish immigrants Ann Shannon and Michael McCann in 1874 in an area of workingclass tenements and saloons. Reflecting the ethnicity of its proprietors, the brewery produced porters and ales, the dark bitter brews favored in the British Isles. From 1892 to 1922, English-born Edgar L. Ropkins operated the brewery, modernizing it with improved equipment and a bottling plant. Ropkins successfully competed with the German lagers that had taken over the major part of the American beer market, but he could not weather Prohibition. Apparently there were few takers for the non-alcoholic version he marketed under the name "Bunny Ale."

Bruce Clouette
Public Archaeology Survey Team, Inc.

Fragment of Ropkins ale bottle, recovered at the site of a farm laborer's house (occupied c. 1860-c. 1940) in East Granby, Connecticut. Photo courtesy Public Archaeology Survey Team, Inc.